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Students' perception of self-presentation towards avatar

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Abstract

This research investigates students' perception of their self-presentation towards the creation of their virtual self, an avatar. Students were provided with an avatar as well as an avatar environment called the Avatar Hall. This research is an empirical research where students have been given access to the Avatar Hall to view their human character avatar. A total number of 56 students were involved. The research instrument used in this research was a Self-Presence Questionnaire (SPQ) inventory developed by Ratan and Hasler [5]. All the items selected address the extension of identity towards virtual character. The inventory was consisted of Likert-type statements, each with five choices of response from "Not At All" to "Absolutely". This research has shown that most of students perceived that their personal identity have influenced their self-presentation towards their avatar in Avatar Hall. This means that choosing an avatar name, appearance, gender, and clothing were mostly related to some aspect of their personal identity.

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1. Introduction

Are we what we are when online? The availability of accessing the Internet and having exist in virtual environment, allow people to present themselves in a variety of different ways, like changing age, physical appearance, gender, and personality [1]. The presentation of avatar is how people manage their identity in virtual world.

An avatar is defined as a character representing an individual in an online environment [2]. It can be presented as an image of the user in the online environments as a medium for communication. Moreover, avatars can be categorised into three types: a real self, a modified self and a fantasy self [3].

Real-self is described as a photo-realistic avatar which is as identical as possible to its owner. Modified-self, on the other hand, is an avatar that is very similar to its owner but differs in one or more attributes from the owner's actual appearance, such as having long, instead of short hair. Lastly, fantasy-self is an avatar that appears entirely different from its owner. It may take the form of a human that is not identical to its maker, but more often appears in a strange form such as an alien. Examples of real-self and fantasy-self avatars are shown in Figures 1 and 2.

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Fig. 1. real-self avatar [2]

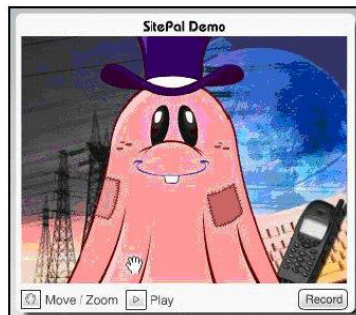


Fig. 2. fantasy-self avatar [2]

However, a human-like avatar should be integrated into a virtual environment [2]. This suggests that the real-self or modified-self avatar would be the best type for use in an online environment. Additionally, an avatar is further categorised into two types: a static avatar and a controllable avatar. These are explained as follows.

- With a static avatar, no movement occurs. Even so, users are still able to enhance their avatar attributes. This type of avatar can be seen in the Yahoo! Avatars. An example of Yahoo! Avatars is shown in Figure 3.



Fig. 3. yahoo! avatars

- A controllable avatar, on the other hand, allows users to take control not only of their attributes but also their movement. This type of avatar is usually found in computer games, such as Lineage, and virtual environments, such as SecondLife. An example of a Second Life avatar is shown in Figure 4.



Fig. 4. second life avatar [3]

The concept of having an avatar is believed to enhance the user's sense of presence, especially in computer games, where the game players creating an avatar to represent themselves in the game world. An avatar is used to control the story of games and having an avatar will make the game more interesting, personal, and attractive [4]. Some games allow their players to choose the types of avatar they prefer. In general, the introduction of an avatar is to represent the role of a game player and each role will be presented by having a character.

1.1. Self-Presence

Self-presence is defined as a state in which users experience their virtual self as if it were their actual self [8]. People connect to numerous self-presence in a variety of ways, such as incorporating customisable virtual bodies, or avatars [5]. Moreover, customising user's self-presence (an avatar) is to gain influence or accomplish social goals in the virtual environment [6]. It is stated that self-presence affect behaviours outside of the virtual environment [7].

Research shows that self-presence can be linked to the virtual self on appearance [9]. The research was done to investigate the role of self-presence in a social virtual world on individuals' offline health, appearance, and well-being. It is suggested that people's personality and the personality of their avatar, influence behaviours in virtual environments [10].

A research has been conducted to investigate the influence of gender on virtual self-representation in the form of avatar [11]. The participants had to design characters to play in a video game, spent 20 min playing the video game, and took their actual pictures. The results indicated that men and women generally selected self-representations consistent with ideal male and female bodies.

2. Methodology

The methodology of the study is based on experimental design. Students were selected by using the convenience sampling method. A convenience sampling is the method often use due to its "natural formed groups (e.g., a classroom, an organisation, a family unit) or volunteers" [12]. A total of 56 undergraduate students from the Department of Human Resource Development at one of the public universities in Malaysia participated in this study. They were all registered for the course module Personality Development.

3. Research Instruments

There were two types of instruments used in this research: an avatar environment, and a questionnaire.

3.1. The Avatar Environment

An avatar environment named Avatar Hall was developed and used by the students. This environment offered an avatar character and avatar attributes, such as clothing, gadgets, and etc. Avatars in the Avatar Hall were based on human characters, whose accessories could be personalised based on the users' preferences. The Avatar Hall system was divided into five main sections: My Avatar, My Inventory, Hall of Fame, The Store, and Contact. See Figure 5 for the Avatar Hall Main Menu page.



Fig. 5. avatar hall main menu

3.2. The Questionnaire

The second research instrument used in this research was a questionnaire developed by Ratan and Hasler named Self-Presence Questionnaire (SPQ) [5]. This questionnaire was modified according to the needs of the study and was used to measure students' perception of their self-representation towards their creation of an avatar in the Avatar Hall. Four items were used to measure students' perception of self-representation, which is related to some aspect of their personal identity, as listed in Table 1.

Table 1. Perception of student's self-presence related to aspect of personal identity

- | |
|---|
| <ol style="list-style-type: none"> 1. My avatar's name is a representative of my personal identity. 2. My avatar's appearance is related to my personal identity. 3. My avatar's gender is related to my personal identity. 4. My avatar's clothing is related to my personal identity. |
|---|

4. Results and Discussion

4.1. My avatar's name is a representative of my personal identity.

The results for item No. 1 are shown in Table 2.

Table 2. Descriptive data – my avatar’s name is a representative of my personal identity

| | Percentage |
|----------|------------|
| | N = 56 |
| Disagree | 17.9% (10) |
| Neutral | 30.4% (17) |
| Agree | 51.8% (29) |

From Table 2, it can be seen that 51.8% of students were agree that their avatar’s name was a representative of their personal identity. This is in line with a categorisation of an avatar, called realistic [13]. According to their definition, the owner of an avatar will create their avatar as similar as possible to the user’s real life identity. Therefore, it could be perceived that 51.8% of the avatar’s users fall under this category. As commented by Yee and Bailenson, “the avatar is our self-representation” [14].

4.2. My avatar’s appearance is related to my personal identity.

The results for item No. 2 are shown in Table 3.

Table 3. Descriptive data – my avatar’s appearance is related to my personal identity

| | Percentage |
|----------|------------|
| | N = 56 |
| Disagree | 23.2% (13) |
| Neutral | 42.9% (24) |
| Agree | 33.9% (19) |

From Table 3, it can be seen that 33.9% of students were positively agree that their avatar’s appearance was related to their personal identity. This is inline with the appearance of user’s avatar is influenced by how users perceived their personality in life [3]. “They project their personality into it - who they are, who they wish to be, what they fear, what moves them [15].”

4.3. My avatar’s gender is related to my personal identity.

The results for item No. 3 are shown in Table 4.

Table 4. Descriptive data – my avatar’s gender is related to my personal identity

| | Percentage |
|----------|------------|
| | N = 56 |
| Disagree | 7.1% (4) |
| Neutral | 23.2% (13) |
| Agree | 69.6% (39) |

From Table 4, it can be seen that majority of students (69.6%) were agree that their avatar's gender was related to their personal identity. This result is supported by a previous study that has shown there were relationship occurred between avatar and gender [3]. Female students chose to have female avatar and female appearance, and these also apply to male students.

4.4. My avatar's clothing is related to my personal identity.

The results for item No. 4 are shown in Table 5.

Table 5. Descriptive data – my avatar's clothing is related to my personal identity

| | Percentage |
|----------|------------|
| | N = 56 |
| Disagree | 28.6% (16) |
| Neutral | 33.9% (19) |
| Agree | 37.5% (21) |

From Table 5, it can be seen that most of students (37.5%) were in a position of positively agree that their avatar's clothing was related to their personal identity. This finding consistent with the study that found a relationship between gender and avatar [3]. As stated in previous paragraph, results has shown that female students were likely to have their avatar gender, appearance and setting as similar as possible to their real life identity.

5. Conclusion

This research investigates students' perception of their self-presentation towards the creation of their virtual self, an avatar. Results have found that most of the students were positively agreed that student's self-presentation towards their avatar were related to their personal identity. Majority of the students were agreed that gender plays an important role in choosing their avatar's gender. Subsequently, students were positively agreed that their real-life identity has influenced their decision of naming their avatar. However, both of avatar's appearance and clothing have contributed to 33.9% and 37.5% respectively. These shows students self-presentation towards their avatar were less affected by their real-life identity. Future research may look at students' emotion and its relationship towards avatars, e.g. how student's emotion affects their avatar appearance.

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